

REMARKS

In the Office Action¹, the Examiner objected to the Abstract and rejected claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,729,694 to Holzrichter et al. ("Holzrichter") in view of U.S. Patent No. 4,654,883 to Iwata ("Iwata"). By this amendment, Applicants have amended the Abstract to contain no more than 150 words. Applicants therefore request that the objection to the Abstract be withdrawn. In addition, Applicants have also amended the Specification to correct a typographical error.

Rejection under 35 U.S.C. § 103(a)

Applicants traverse the rejection of claims 1-16 under 35 U.S.C. § 103(a) as being unpatentable over Holzrichter in view of Iwata. A *prima facie* case of obviousness has not been established. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2142, 8th Ed., Rev. 5 (August 2006). Moreover, "in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." USPTO Memorandum from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, page 2.

A *prima facie* case of obviousness has not been established, for at least the reason that Holzrichter and Iwata, taken alone or in combination, do not teach or

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement of characterization in the Office Action.

suggest each and every element of Applicants' independent claim 1, from which claims 2-16 depend. In particular, the references do not teach or suggest a "microphone being installed on a surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull, that is, in the lower part of the skin behind the auricle," as defined in claim 1 (emphasis added).

Holzrichter discloses a method and apparatus for speech coding integrating "nonacoustic information" and "acoustic information." See Holzrichter, Col. 4, lines 55-58. However, there is no teaching or suggestion in Holzrichter of a "microphone being installed on a surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull, that is, in the lower part of the skin behind the auricle," as defined in claim 1 (emphasis added). In fact, the Examiner also admits that Holzrichter fails to teach or suggest a "microphone being installed on a surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull, that is, in the lower part of the skin behind the auricle" (emphasis added). See Office Action, page 3.

The Examiner asserted that Iwata, however, teaches a "microphone being installed on a surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull, that is, in the lower part of the skin behind the auricle," as recited in claim 1. See Office Action, page 3. However, this is not correct.

Iwata teaches that the "microphone 17 comes into contact with a side head portion at the rear of the other ear when the head band 11 is put on the user's head and the earphone speaker 14 comes into contact with one ear as shown in FIG. 2." See Iwata, Col. 3, lines 30-35. Furthermore, Figure 2 of Iwata clearly shows that microphone 17 is placed on the **upper part** of the skin behind the auricle. Therefore,

the placement of the microphone in Iwata is not in the same position as claimed in claim 1 and supported by Figure 1. Thus, Iwata does not teach a "microphone being installed on a surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull, that is, in the lower part of the skin behind the auricle," as defined in claim 1.

For at least the reasons stated, Iwata and Holzrichter do not teach or suggest all the features recited in independent claim 1 and required by dependent claims 2-16. No *prima facie* obviousness has been established. The improper 35 U.S.C. § 103(a) rejection should be withdrawn.

Applicants further advise that in accordance with the present invention an advantageous position for installing a microphone has been found for sampling the non-audible murmur. This position is located at the surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull. As discussed in the specification at, for example, page 33 line 21 to page 34 line 3, which compares the signal-to noise ratio between Fig. 14 and Fig. 16, there exists a large difference of about 8 decibels corresponding to a 30% improvement in performance (60% to 90%) in connection with the speech recognition engine Julius (twenty thousand word level), which is free basic software for Japanese dictations. Thus, a feature of this invention is the "microphone being installed on a surface of the skin on the sternocleidomastoid muscle immediately below the mastoid of the skull, that is, in the lower part of the skin behind the auricle" (emphasis added). Due to this position of installation of the microphone, it is possible to sample most distinctly a non-audible murmur.

Thus, for these additional reasons, Applicants submit that claims 1-16 are allowable over the applied references.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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